



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,623	12/03/2004	David John Law	608-445	5306

23117 7590 04/03/2006

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

ZUCKER, PAUL A

ART UNIT PAPER NUMBER

1621

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/516,623	Applicant(s) LAW ET AL.	
	Examiner Paul A. Zucker	Art Unit 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Current Status

1. This action is responsive to Applicants' amendment of 17 January 2006.
2. Receipt and entry of Applicants' amendment is acknowledged.
3. Claims 21-40 are pending.
4. The objections to the specification set forth in paragraph 1 of the previous Office Action mailed 17 October 2005 are withdrawn in response to Applicant's amendment.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 20-24 are finally rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 20, 23 and 24 recite the limitations "[greater than 0 to 5]", "[greater than 2 to 15]" and "[greater than 2 to 5]" in lines 10, 2 and 2, respectively. The lower limit defined by these limitations is unclear. For example, in the case of claim 20 does a ratio of 15:1 one meet the required limitation since 15 is greater than five? Claims 20, 23 and 24 and dependent claim 21 are therefore rendered indefinite.

Examiner's Response to Applicant's Remarks with Regard to This Rejection

6. Applicants' substitution of a symbolic representation of the previously employed phrase fails to address the issue raised in the rejection.

Applicant's arguments filed 17 January 2006 have been fully considered but they are not persuasive for the reasons set forth above.

7. Claims 21-40 are finally rejected under 35 U.S.C. 102(b) as being anticipated by Ditzel et al (US 5,877,348 03-1999). Ditzel discloses (Columns 11 and 12, lines 36-56, Table 5, entries 4,5,8-10) a process for the carbonylation of methanol in the presence of an iridium catalyst, iodide salt and/or source (including alkali and alkaline earth metal iodides) in the presence of an ruthenium promoter present in a ratio of 2/1 with respect to the iridium catalyst. Ditzel additionally discloses (Column 5, lines 37-39) ruthenium promoter to iridium catalyst ratios of greater than 5:1 that encompasses the instantly claimed ranges. Ditzel discloses (Column 6, lines 7-26) the establishment of a recycle stream, which contains iridium catalyst and stabilizer, after distillation of acetic acid and, presumably, carbon monoxide any other non-condensable gases. The stabilizer, as well as other components, is introduced into the reaction by the recycle stream. Ditzel discloses (Column 6, lines 7-26) iodide stabilizer in the range 0.1:1 to 1:1 with respect to iridium. Ditzel therefore anticipates claims 21-40.

Examiner's Response to Applicant's Remarks with Regard to This Rejection

8. Applicants have presented several arguments with regard to this rejection. The

Examiner addresses these below:

- a. Applicants argue that Ditzel discloses a molar ratio of lithium cation to iridium and not a stabilizing iodine compound. The examiner responds that since Ditzel employs lithium iodide, the two ratios are equivalent.
- b. Applicants further argue that there is no disclosure or suggestion that this molar ratio be combined with a molar ratio of promoter to iridium of greater than 2:1. The Examiner disagrees and directs Applicants' attention to Figure 5 in which all of the claim limitations are met for the Ir/Ru ratio of 1:5 with lithium (and, therefore, iodide) ratios up to 3:1.
- c. Applicants' discussion of unexpected results does not obviate Ditzel's disclosure of the instantly claimed invention

Applicant's arguments filed 17 January 2006 have been fully considered but they are not persuasive for the reasons set forth above.

Conclusion

9. Claims 21-40 are pending. Claims 21-40 are finally rejected.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1621

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Zucker whose telephone number is 571-272-0650. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

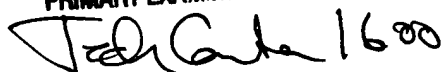
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 1621

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PAULA A. ZUCKER, PH.D.
PRIMARY EXAMINER

 1600